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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,783	10/27/2003	Willes H. Weber	81081060 (FGT 1849 PA)	2782
28549	7590	03/28/2005	EXAMINER	
KEVIN G. MIERZWA ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			GOINS, DAVETTA WOODS	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,783	WEBER ET AL.	
	Examiner	Art Unit	
	Davetta W. Goins	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 5-10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Allowable Subject Matter

1. Claims 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berenz et al. (US Pat. 6,420,704 B1) in view of Kormos (US Pat. 6,815,680 B2).

In reference to claims 1, 4, 13, 15-18, Berenz discloses a) the claimed light source generating an illumination beam, which is met by illuminator 12 (col. 4, lines 13-28), b) the claimed receiver having a pixel array for capturing an image in response to at least a reflected portion of the illumination beam, which is met by IR sensitive imaging device 14 (col. 3, lines 60-67; col. 4, lines 1-12), and c) the claimed controller coupled to the light source and the receiver for receiving a vehicle speed limit input, which is met by digital signal processor (DSP) 22 (col. 4, lines 29-46). Berenz does not specifically disclose the image corresponding to a first horizontal field of view (FOV) angle, the controller selecting a portion of the image as a non-linear function of the vehicle speed to generate a second horizontal FOV angle for displaying to the vehicle

Art Unit: 2632

operator. However, Berenz does disclose a processor 22 that receives images from camera 14 as well as the vehicle's speed to determine the an appropriate correction voltage 26 that corrects for the forward motion of the camera; the system includes and LCD 31 that displays the captured images from camera 14 by dynamically correcting the magnification of the object 20 during an extended exposure to compensate for the forward motion of the car 28 (col. 6, lines 24-47).

Kormos discloses an image displaying system operated for night vision including a camera unit 30 coupled to a computer 60, the computer 60 provides instructions to the camera unit 30 as to information specific to the vehicle such as the steering angle from the steering column 16, or any type of sensor that can provide information regarding the heading of the vehicle 10, such as the steering rate, inclination rate, and/or orientation (vehicle change of direction), may be used in auxiliary vision system 20 (col. 3, lines 29-46). The camera unit 30 and a display that displays in the auxiliary image substantially all of the information in the horizontal FOV of the camera unit 30. The magnification of an auxiliary vision system 20 may be changed by changing the horizontal FOV of the camera unit 30, the horizontal dimension of the image on display 17 or the distance between the driver's eye and the display 17 (col. 6, lines 33-67). Since both Berenz and Kormos disclose vision systems for a vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of determining a first horizontal FOV angle of the image and take into consideration the vehicle's change of direction, as disclosed by Kormos, as well as a second horizontal FOV angle, with the system of Berenz to ensure that the system is capable of detecting an object and displaying a wide field angles detected by the camera unit without having to use a large display.

Art Unit: 2632

In reference to claims 2, 14, Berenz discloses the claimed receiver is a CMOS or CCD camera, which is met by the imaging device 14 may be selected from one of a CCD or CMOS cameras (col. 4, lines 1-12).

In reference to claim 3, Berenz discloses the claimed light source is a non-incandescent light source, which is met by light 24 within illuminator 12 such that an illumination wavelength of approximately 800 nanometers (nm) which is near the peak response of most CCD and CMOS cameras, and invisible to the human eye (col. 4, lines 13-28).

In reference to claims 11, 19, Berenz discloses the claimed display for displaying the image corresponding to the second FOV angle to the vehicle operator, which is met by LCD 31 (col. 6, lines 24-47).

In reference to claims 12, 20, although Berenz does not disclose the claimed heads-up-display, he does disclose an LCD 31 (col. 6, lines 24-47). Kormos discloses a display unit 40 that is commonly known as a head-up display unit (col. 3, lines 14-28). Since both Berenz and Kormos disclose vision systems for a vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a heads-up-display, as disclosed by Kormos, with the system of Berenz, as an alternative type of display that will allow the driver to look forward while driving and still see the images captured by the night vision system.

Art Unit: 2632

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957.

The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.W.G.
March 8, 2005

Davetta W. Goins
Primary Examiner
Art Unit 2632